



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW6522A00231-W142AK-

3T

Job Sheet 199131



Part No: RBW6522A00231-W142AK-3T **Job Qty:** 5 pcs

Part Name: Tail Rotor Gear Box/Mast Output Oil Seal Assembly Press Tool



Part Weight: 0 lbs

Status: Cancelled

Priority: Medium

Job Created: 8/13/19

Job Tracking No:

Due Date: 10/7/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6522A00231-W142AK-3T Rev 1 IPP Rev A 18.02.07 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
92	Purchasing	5 pcs	10/7/19	10/7/19	0.00	0.00	Purchasing - 1		
							Purchasing - 2		
							Purchasing - 3		
94	Packaging 2-1 - Receive - B4B	5 pcs	10/7/19	10/7/19	0.00	0.00	Packaging 2 - 1 - B4B		
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		
							Packaging 2 - 28 - B4B		



Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S217964



Part: RBW6522A00231-W142AK-3T

Job No: 199131

Serial No/Batch: S217964

Revision: 1

Inspector:

Exp Date:

Instructions:

Date: 09/27/19

					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
96	QC 6	5 pcs	10/7/19	0.00 0.00	QC 6 - 9	
					QC 6 - 68	DAS
					QC 6 - 61	61
					QC 6 - 40	9-89
					QC 6 - 81	
100	Bandsaw - 1	5 pcs	10/7/19	0.00 0.50	Bandsaw - 1 - B4B	
120	SL-2500Y - 2 - B4B	5 pcs	10/7/19	1.00 2.50	SL-2500Y - 1 - B4B	
130	QC 2	5 pcs	10/7/19	0.00 0.00	QC 2 - 1	
					QC 2 - 12	
					QC 2 - 14	
					QC 2 - 17	
					QC 2 - 19	
					QC 2 - 2	
					QC 2 - 20	
					QC 2 - 22	
					QC 2 - 23	
					QC 2 - 25	
					QC 2 - 32	
					QC 2 - 33	
					QC 2 - 35	
					QC 2 - 39	
					QC 2 - 4	
					QC 2 - 40	
					QC 2 - 44	
					QC 2 - 45	
					QC 2 - 48	
					QC 2 - 49	
					QC 2 - 50	
					QC 2 - 51	
					QC 2 - 52	
					QC 2 - 57	
					QC 2 - 62	
					QC 2 - 63	
					QC 2 - 8	
					QC 2 - 66	
					QC 2 - 64	
					QC 2 - 65	
					QC 2 - 5	
					QC 2 - 71	
					QC 2 - 73	
					QC 2 - 69	
140	QC 8	5 pcs	10/7/19	0.00 0.00	QC 8 - 12	
					QC 8 - 14	
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 39	

					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	
					QC 8 - 9	
					QC 8 - 68	
					QC 8 - 67	
					QC 8 - 1 (A)	
					QC 8 - 47	
					QC 8 - 40	
					QC 8 - 52	
					QC 8 - 23	
					QC 8 - 57	
170	Outsource - 12 - Black Oxide	5 pcs	10/7/19		GRO002-VC	5
180	Packaging 2-1 - Receive - B4B	5 pcs	10/7/19	0.00 0.00	Packaging 2 - 1 - B4B	
					Packaging 2 - 2 - B4B	
					Packaging 2 - 3 - B4B	
					Packaging 2 - 5 - B4B	
					Packaging 2 - 4 - B4B	
					Packaging 2 - 6 - B4B	
					Packaging 2 - 7 - B4B	
					Packaging 2 - 8 - B4B	
					Packaging 2 - 9 - B4B	
					Packaging 2 - 10 - B4B	
					Packaging 2 - 11 - B4B	
					Packaging 2 - 12 - B4B	
					Packaging 2 - 13 - B4B	
					Packaging 2 - 14 - B4B	
					Packaging 2 - 15 - B4B	
					Packaging 2 - 16 - B4B	
					Packaging 2 - 17 - B4B	
					Packaging 2 - 18 - B4B	
					Packaging 2 - 19 - B4B	
					Packaging 2 - 20 - B4B	
					Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
					Packaging 2 - 27 - B4B	
					Packaging 2 - 28 - B4B	
					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
190	QC 6	5 pcs	10/7/19	0.00 0.00	QC 6 - 9	
					QC 6 - 68	
					QC 6 - 61	
					QC 6 - 40	
					QC 6 - 81	
200	Packaging 3-1 - Stock - B4B	5 pcs	10/7/19	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	

				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	DAS
				Packaging 3 - 7 - B4B	28
				Packaging 3 - 8 - B4B	9-89
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
210 QC 21 - SA	5 pcs	10/7/19	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	21
				QC 21 - SA - 53	9-89

OCT 03 2019

Part Op 92 - (Purchasing) ISSUE P/O TO ARROW TECH MACHINE WORKS P/O #: 1180444262 MANUFACTURE
 Descriptions: RBW6522A00231-W142AK-3T AS PER DWG C OF C IS REQUIRED

94 - (Receive & Inspect for Damage & Mat'l Certs)

96 - (QC6- All purchased or subcontracted products)

100 - (Bandsaw) CUT BLANKS TO 2.875"

120 - (MORI SL2500Y LATHE) 1-Machine as per DWG. FC966 FOLIO REV: _____ DWG REV: _____

2-Deburr 3-Engrave T/N And / or S/N number as required Using Marktronic engraver as per DWG.

130 - (QC2- Inspect parts off machine FAI/FAIB)

140 - (QC8- Inspect parts - second check)

170 - (Outside Processing - Black Oxide) -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-

13924C Class 1 -Certificate of Conformity is required

180 - (Receive & Inspect for Damage & Mat'l Certs)

190 - (QC6- All purchased or subcontracted products)

200 - (Identify as per dwg & Stock Location: _____)

210 - (QC21- Final Inspection - Work Order Release)

x 5 Plus aug 14. 2019

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW6522A00231-W142AK-3TP	Tail Rotor Gear Box/Mast Output Oil Seal Assembly Press	5 Ea (1 ea) 92-	Purchasing	5217913
	Tool			

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
92-Purchasing	RBW6522A00231-W142AK-3TP	5	0	0

Part Specifications

Specifications could not be found.

Plex 9/27/19 11:02 AM dart.lussier.patrick

This drawing, specifications, and concepts contained here in are the sole property of Red Barn Machine, and may not be reproduced or used in any fashion without the prior written permission of Red Barn Machine.

REVISIONS		DATE	INITIAL	APPROVED
REV	DESCRIPTION			
1	ADDED MISSING 1.5 DIM. AND FEATURE CONTROLS TO #3.4251-3.4204 & #3.1740-3.1692 DIMS	9/28/12	RJC	SE

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

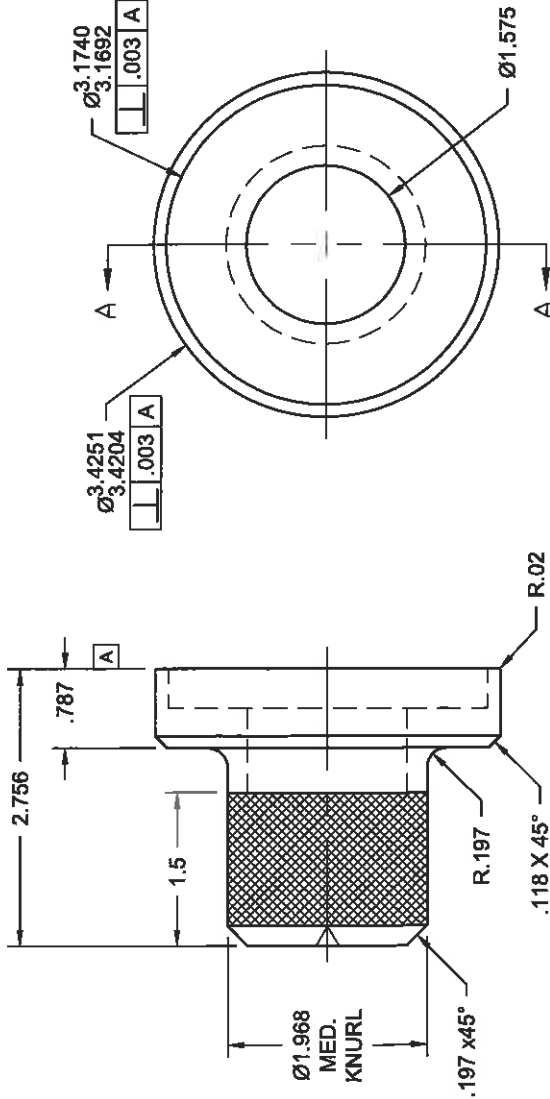
WITHOUT NOTICE

WORK ORDER

NO. 199131

MUS

19-08-13



SECTION A-A

NOTES

1. ALSO SOLD IN KIT RBW6505G00231-3T.

RED BARN MACHINE	
TITLE OUTPUT OIL SEAL PRESS TOOL	
DWG NO. RBW6522A00231-W142AK-3T	
REV 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	
DECIMALS	
XX ± .005	
XX ± .01	
XX ± .1	
FRACTIONS ± 1/32	
ANGLES ± .1	
UNLESS OTHERWISE SPECIFIED 1. BORE AND SHAFT EDGES .015 X 45° PR .015	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	
DATE 1-3-09	
SHEET 1 of 1	
DRAWN BY: PERRITT	
APPROVED: P. M. M.	
HEAT TREAT: BLACK OXIDE	
SPEC: USED ON MODEL: AW139	
ASSY #	
BIO PART #	
UNIT 3T	
DESCRIPTION PRESS TOOL	
MATERIAL SP	
Ø3-1/2 X 2-7/8	
Pg.	

Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐



Job: _____ Part No. _____		DISPOSITION Rework ☐ ☐ ☐ Scrap ☐ ☐ ☐ Use-as-is ☐ ☐ ☐		DEPARTMENT/PROCESS Skid-tube ☐ ☐ ☐ ☐ ☐ Machining ☐ ☐ ☐ ☐ ☐ Large Fab ☐ ☐ ☐ ☐ ☐ Cross tube ☐ ☐ ☐ ☐ ☐ Small Fab ☐ ☐ ☐ ☐ ☐ Finishing ☐ ☐ ☐ ☐ ☐ Eng. (Non-AW) ☐ ☐ ☐ ☐ ☐ Prod. Eng. Coord. ☐ ☐ ☐ ☐ ☐ Rec/Store/Packaging ☐ ☐ ☐ ☐ ☐ Engineering ☐ ☐ ☐ ☐ ☐ Water Jet ☐ ☐ ☐ ☐ ☐ Supplier ☐ ☐ ☐ ☐ ☐ Quality ☐ ☐ ☐ ☐ ☐		MRB (QSI042)																													
Date : _____		Sequence #: _____		QTY Affected : _____		Disposition																													
Description Work Order Deviation		Completed By																																	
Lead hand / Supervisor		QC / QA Coordinator																																	
Root Cause Operator ☐ ☐ ☐ Manufacturing Process ☐ ☐ ☐ Equip/Tooling ☐ ☐ ☐ Handling/Preservation ☐ ☐ ☐ Material ☐ ☐ ☐ Product Improvement ☐ ☐ ☐ Process Improvement ☐ ☐ ☐ Human Factors ☐ ☐ ☐		FAULT CATEGORY <table border="1"> <tr> <td>Pressure/Forced</td> <td>Contamination</td> <td>Power Loss/Surge</td> <td>Positioned Wrong</td> </tr> <tr> <td>Bending</td> <td>Misaligned/off center</td> <td>Folio/Program</td> <td>Outside Tolerance</td> </tr> <tr> <td>Crushing</td> <td>BOM/Route</td> <td>Grain Direction</td> <td>Drawing</td> </tr> <tr> <td>Cracks</td> <td>Broken/Damage/Defect</td> <td>Weld</td> <td>Finish</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave/Twist</td> <td>Incomplete/Unclear Instructions</td> <td>Wrong Stock Pulled</td> <td>Part Lost/Missing</td> </tr> <tr> <td>Marks/Chatter</td> <td>Drill Holes</td> <td>Out of Sequence</td> <td>Misread</td> </tr> <tr> <td>Mislabeled</td> <td>Fit/Function</td> <td>Off-set/Set-up</td> <td></td> </tr> </table>						Pressure/Forced	Contamination	Power Loss/Surge	Positioned Wrong	Bending	Misaligned/off center	Folio/Program	Outside Tolerance	Crushing	BOM/Route	Grain Direction	Drawing	Cracks	Broken/Damage/Defect	Weld	Finish	Crimp/Kink/Ripple/Wave/Twist	Incomplete/Unclear Instructions	Wrong Stock Pulled	Part Lost/Missing	Marks/Chatter	Drill Holes	Out of Sequence	Misread	Mislabeled	Fit/Function	Off-set/Set-up	
Pressure/Forced	Contamination	Power Loss/Surge	Positioned Wrong																																
Bending	Misaligned/off center	Folio/Program	Outside Tolerance																																
Crushing	BOM/Route	Grain Direction	Drawing																																
Cracks	Broken/Damage/Defect	Weld	Finish																																
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Marks/Chatter	Drill Holes	Out of Sequence	Misread																																
Mislabeled	Fit/Function	Off-set/Set-up																																	
Other/Details:																																			



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB044262**



Supplier: ARR002-VU
Arrow Tech Machine Works
29751 E. Enid Road,
Unit C
Eugene, OR 97402 USA
Phone: 541-780-6938
Fax: 458-215-4938

Attention: , Ana
(541) 780-6938

Ship To:

PO No: POHB044262

PO Date: 8/14/19

Due Date: 10/2/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	199130	RBW6522A00231-W142AJ-3TP			Tail Rotor Gear Box/Servo Actuator Oil Seal Fit/Extracting Tool As Per Dwg RBW6522A00231-W142AJ-3T Rev. 5	Firmed -		10/2/19	3 Ea	0 Ea	3 Ea	\$2,061.26/Ea	\$6,183.78
						X3			SEP 27 2019				DP
2	99131	RBW6522A00231-W142AK-3TP			Tail Rotor Gear Box/Mast Output Oil Seal Assembly Press Tool As Per Dwg RBW6522A00231-W142AK-3T Rev. 1	Firmed -		10/2/19	5 Ea	0 Ea	5 Ea	\$185.00/Ea	\$925.00
						X5			SEP 27 2019			DAS 61 9-89	DP
3	199132	RBW6522A00231-W142S-3TP			Tail Rotor Gear Box/Mast Output Oil Seal Assembly Support Tool As Per Dwg RBW6522A00231-W142S-3T Rev. 2	Firmed -		10/2/19	5 Ea	0 Ea	5 Ea	\$195.79/Ea	\$978.95
						X5			SEP 27 2019				DP

Grand Total: \$8,087.73



Dart Aerospace Ltd.
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Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB044262



Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 8/14/19 8:36 AM dart.lussier.patrick



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No: HB044262

Dated: 9/20/2019

Our Order / Job No: AWT-HB044262 A2

Order Qty: 5

Part Name: OUTPUT OIL SEAL PRESS TOOL

Part Number RBW6522A00231-W142AK-3T

Lot Size: N/A Ship Date: 9/20/2019

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: RBW6522A00231-W142AK-3T

Rev: 1

Material Size and Type: STRESS PROOF

Material Specifications: STEEL: ASTM A108

Heat Treatment: N/A

Plating/Finish: BLACK OXIDE: QMSI-6.2.2 B.O. REV-D

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date: 9/20/19

Signed: Herbert M. Feld

DAS
61
9-89

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com